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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,120	02/19/2002	Sylvain Nadeau	2002 P 02825 US	6825

7590 06/13/2003

Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
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EXAMINER

NGUYEN, TRAN N

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,120

Applicant(s)

NADEAU ET AL.

Examiner

Tran N. Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-3,6-12 and 16-19 is/are rejected.
- 7) ☐ Claim(s) 4,5,13-15 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. **Claims 1-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 10, and 19, the recitation "decoupling structure mounting the motor housing to the supporting structure in a manner to provide a certain natural frequency of the motor in torsion around the axis of rotation of the shaft while providing natural frequencies higher than the certain natural frequency for degrees of freedom of the motor other than torsion" is indefinite because of the following:

The term "a certain natural frequency" is unclear because of the term "certain". In light of the spec, should it be "a predetermined natural frequency" instead?

The term "degrees of freedom" is unclear freedom of what? Degrees of freedom of rotation or degrees of freedom of vibration/oscillation? In light of spec, it is understood as degrees freedom of vibration.

In claim 6, "the projection" and "the recess" lack antecedent basis. In light of the spec, *claim 6 is treated as if it depends from claim 4.*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 7-11, 16-18 and 19, as understood in light of the spec, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp (US 4181472) in view of Gritter et al (US 4651066).

Sharp discloses a motor assembly comprising: a motor with motor housing (14); a supporting structure (12) carrying the motor; decoupling structure (62) mounting the motor housing to the supporting structure, wherein the spring holds the motor in position by the spring's elastically characteristic. The spring's elastically characteristic would obviously provide a predetermined natural frequency of the motor in torsion around the axis of rotation of the shaft while providing natural frequencies higher than the certain natural frequency for degrees of freedom of the motor other than torsion, and a pivot structure, including a motor shaft (44) and components (48, 50, 56 of figs 1-3), associated with the supporting structure and the motor defining a pivot between the motor and the supporting structure, with a center of the pivot being aligned with the axis of rotation.

Sharp substantially discloses the claimed invention, except for the limitations of a DC motor including: a stator, a rotor assembly supported for rotational movement with respect to the stator and the control circuit with switch to be controlled by a pulse width modulated signal.

Gritter, however, teaches a DC motor with a permanent magnet stator, a rotor assembly is an armature supported for rotational movement with respect to the stator (fig 3). These features are essential components of the motor. Therefore, obviously a motor must have these components in order to be operatable. The Gritter's motor also includes a control circuit with switch to be controlled by a pulse width modulated signal (fig 2, and figs 12) for controlling the speed of the motor.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify Sharp's motor assembly by embodying a motor having a stator, a rotor assembly supported for rotational movement with respect to the stator, and a the control circuit with switch to be controlled by a pulse width modulated signal, as taught by of Gritter, because these components are essential parts of the motor in order to be controllably operatable.

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp and Gritter, as applied in the rejection against the base claim, and further in view of level of ordinary skills of a worker in the art.

The combination of Sharp and Gritter refs substantially discloses the claimed invention, except for the added limitations of the torsional springs are provided generally 120 degrees apart.

The Sharp's important teaching is to use spring for mounting the motor to the support structure carrying the motor. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the motor support assembly by embody not only one but three torsional springs at an arrangement of 120 degree apart. This would further improve the reduction of vibration therein and doing so only require skills in the art because it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. vs. Bemis Co.*, 193 USPQ 8.

Allowable Subject Matter

Claims 4-5, 13-15, and 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

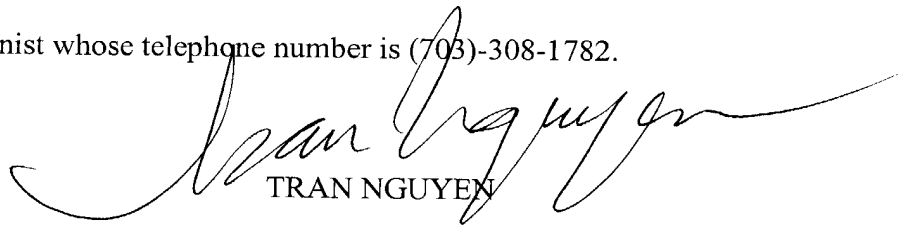
Claim 6 is rejected but would be allowable, if it actually depends from claim 4, as understood in light of the spec.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N Nguyen whose telephone number is (703) 308-1639. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)-395-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

A handwritten signature in black ink, appearing to read 'Tran Nguyen', is written over the printed name.

TRAN NGUYEN

PRIMARY PATENT EXAMINER

TC-2800